ERP Conservation Strategy for Stage 2 Implementation (Delta and Suisun Planning Area)

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Stage 2 ERP CS for the Delta and Suisun Planning Area: Key Assumptions

- The method and operation of water conveyance is a primary factor influencing ecosystem restoration and species recovery
- Shifting from reliance on thru-Delta conveyance allows greater opportunities for improving ecological processes and habitat conditions throughout the Delta and Suisun Planning Area.

ERP Stage 2 Conservation Strategy

- > ERP a 30-year program; Stage 1 (2000-2007) results are providing guidance on specific actions to be taken during Stage 2 (2008-2030).
- Current geographic focus is the Delta and Suisun Marsh and Bay ("Delta and Suisun Planning Area")
- Regional strategies specific to the remainder of the ERP Focus Area (San Joaquin and Sacramento Valleys, East Side Tributaries, and North San Francisco Bay) will be developed by the end of 2009.

Stage 2 ERP CS for the Delta and Suisun Planning Area: : Improve Critical Ecological Processes

- > Hydrology
 - freshwater flow
 - environmental water quality
 - Salinity
 - Turbidity
 - · Water temp, dissolved oxygen, pH, dissolved organic carbon
- > Aquatic food web dynamics

Stage 2 ERP CS for the Delta and Suisun Planning Area: Restore Habitats and Functions

- > Six broad categories for lands within the Planning Area:
 - Intertidal (ranges from +1-7' in elevation, depending on location)
 - Aquatic (includes subtidal [1-5' below MLLW], deep open water, and channels)
 - Seasonal Floodplain (overlaps with several other habitat types and agriculture)
 - Upland (> +5 feet in elevation)
 - Grassland/Vernal Pool Transition Corridor (upland area connecting Cache Slough Complex and Suisun Marsh)
 - Subsided lands (< -5 feet in elevation)

Stage 2 ERP CS for the Delta and Suisun Planning Area: Future Conditions & Ecosystem Response

- > Six "drivers of change" (Mount & Twiss 2006)
 - Subsidence
 - · Sea level rise
 - Regional climate change
 - Catastrophic events
 - Invasive species
 - Urbanization
- > Includes implications for ecosystem processes, habitat restoration, and stressors

Stage 2 ERP CS for the Delta and Suisun Planning Area: Reduce Stressors and Impacts

- > Water diversions
- > Non-native and/or invasive species
- > Water quality
 - chemical toxins (pesticides, ammonia, endocrine disrupters, etc.)
 - · dissolved oxygen
 - · mercury and methylmercury
 - · selenium & other heavy metals

Stage 2 ERP CS for the Delta and Suisun Planning Area: Potential Actions for Phase 1 (2009-2020)

- > Assess and Incorporate Other Planning
 - Delta Vision
 - BDCP
 - DRMS
 - DRERIP AMPT
- http://www.delta.dfg.ca.gov/erp/reports docs.asp Transmittal memo and strategy